

# INVERTED RESEARCH MICROSCOPE

Specifications are subject to change without any obligation on the part of the manufacturer. 2025.09

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**NIB900** series  
Research Inverted Biological Microscopes

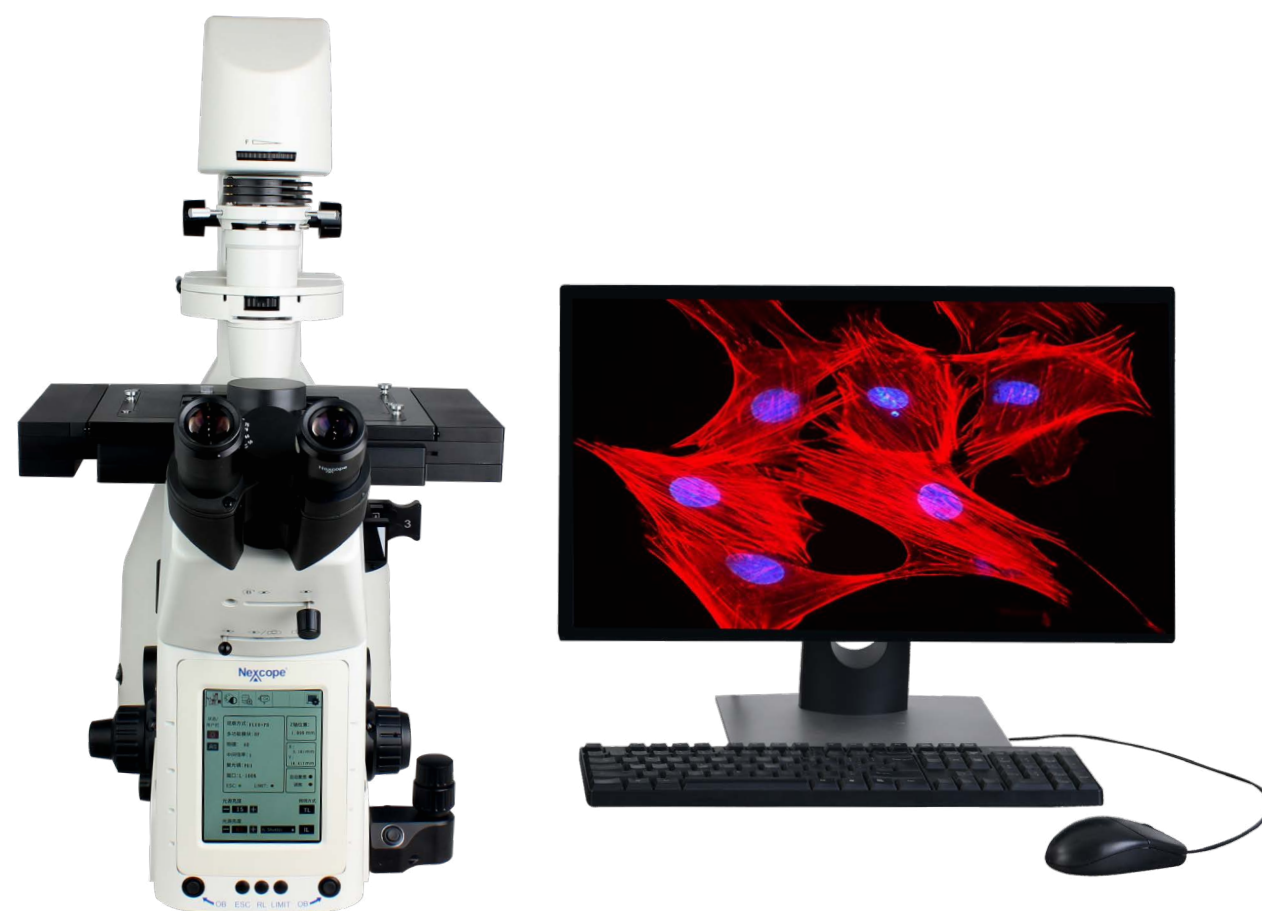
**Nexcope**®

# NIB900 Series

## Research Inverted Biological Microscopes

NIB900, as a research inverted microscope designed to meet the needs of advanced life science research, can meet your various needs. It is an all-round microscope, which can realize brightfield, phase contrast, polarization, DIC, fluorescence and other observation methods. Even the confocal and super-resolution required by top life science research can be realized on this microscope.

Fully consider the user's operating habits and adopt ergonomic design, which greatly reduces the mechanical fatigue caused by long-term observation. It also adopts high-speed electric control, which simplifies and visualizes the complicated operation and makes the operation easier and simpler.



**NIB960**

### Motorized Inverted Biological Microscopes

Front microscope operation screen to realize full electric control



**NIB910**

### Manual Inverted Biological Microscopes

brightfield, phase contrast, fluorescence, DIC and other observation methods



**NIB920**

### Intelligent Inverted Biological Microscopes

Adding a large display makes darkroom operation easier

# NIB910/NIB920

## Reliable High-Resolution Images Meet Your Scientific Research Needs

NIB910 is manual, simple, comfortable and highly integrated. It adopts advanced NIS infinity optical system, which can meet the observation modes of brightfield, phase contrast, DIC, fluorescence and Hoffman phase contrast. Various integration options allow your microscope to meet the present and future needs. Equipped with multiple image ports for optical output, it is convenient to connect the camera and detector. Multi-port imaging is supported, and multiple cameras can simultaneously shoot images at different wavelengths. NIB920 is equipped with an oversized microscope status display screen, which is more suitable for microscope operation in darkroom and makes complicated microscope operation more intuitive and visible.



### N-iPLFN PH plan semi-apochromatic objective

Semi-apochromatic objective lenses have built-in correction rings, which can correct the poor coverage caused by nonstandard cover glass thickness.



### The system condenser

Brightfield observation, phase contrast observation and DIC observation provide the maximum choice for your experiment.



### Ergonomic Transmitted illumination

Ergonomic transmission lighting column ensures that users have a larger working space and is convenient for changing samples.



### Multi-end optical path exit

The left side of the microscope is provided with an optical output selection dial, which is convenient for distributing optical images to different ports and provides expanded space for more optical image applications.



### Switching intermediate magnification

Through smooth turntable operation, the intermediate magnification can be quickly switched between 1 and 1.5 times.



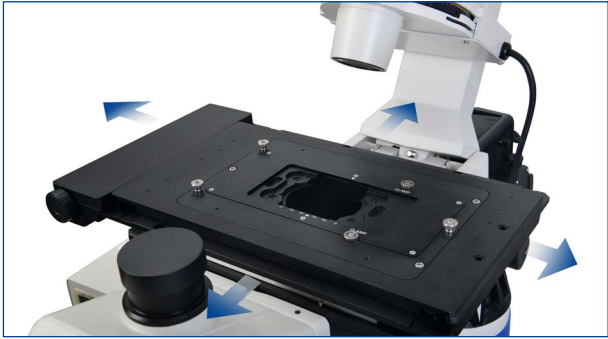
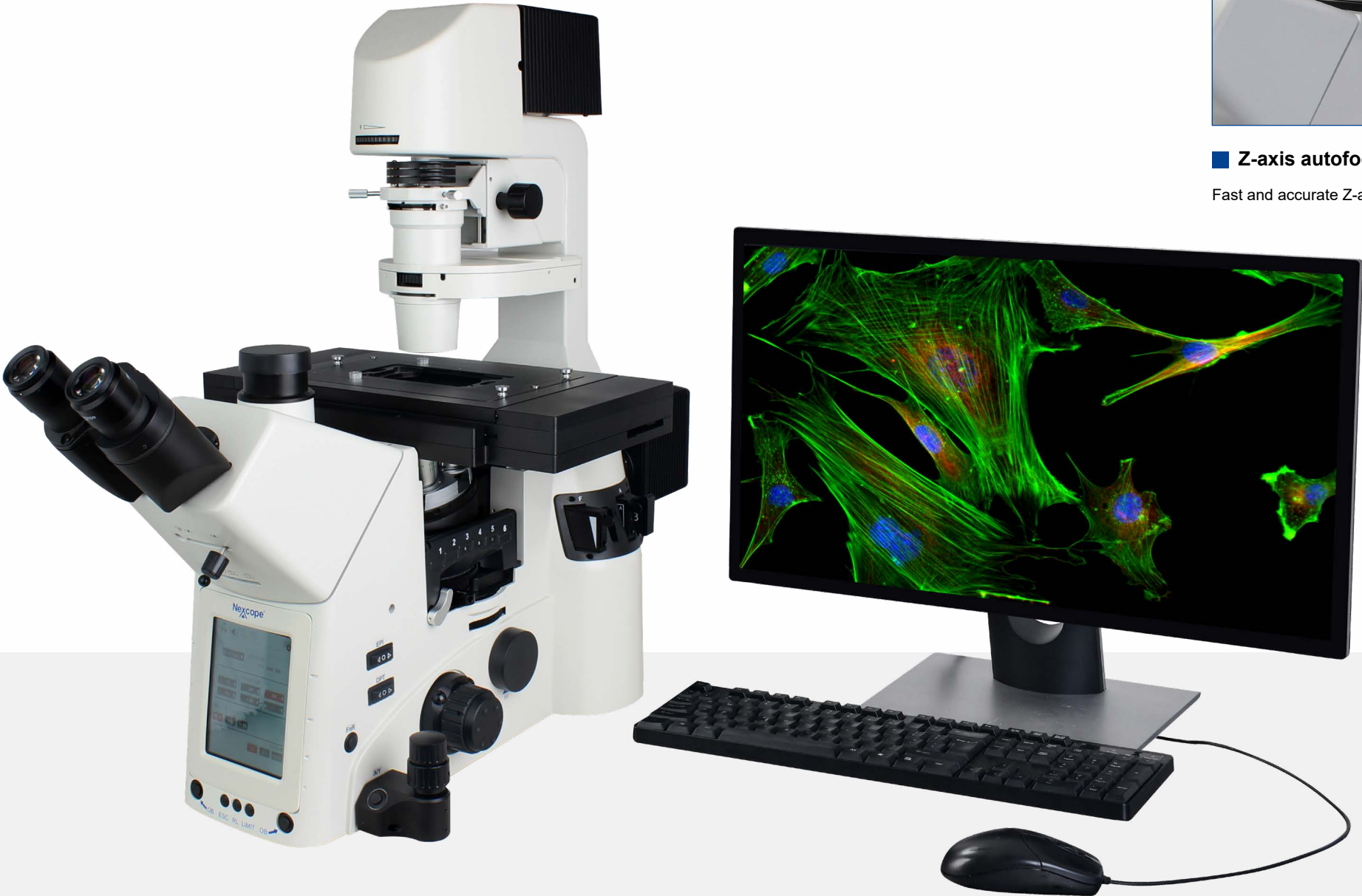
### Microscope use status display screen

In order to facilitate the use of microscope in darkroom, NIB920 adds a 4.3-inch touch screen on the front panel to show the use status of microscope.

# NIB960

## A Variety of Electric Components Are Combined To Realize Fast Reading and Accurate Operation

You can control a variety of electric parts of the microscope through software, such as objective lens conversion, focusing, condenser conversion, fluorescent module conversion and so on. Quick and simple operation of this scientific inverted microscope not only increases your work efficiency, but also reduces the exposure time of cells and phototoxicity, and the experimental results obtained are more accurate and valuable.



### Motorized stage

Large stroke, high precision, quick positioning, suitable for multi-point observation.



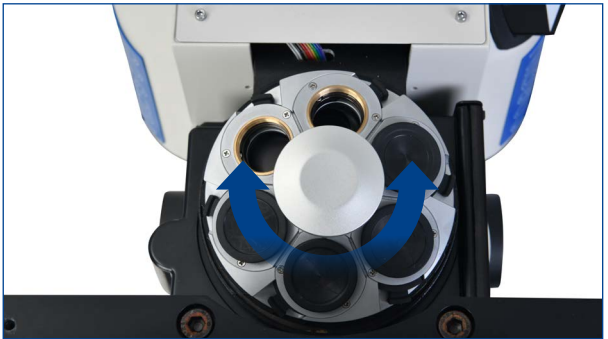
### Z-axis autofocus

Fast and accurate Z-axis control can be performed.



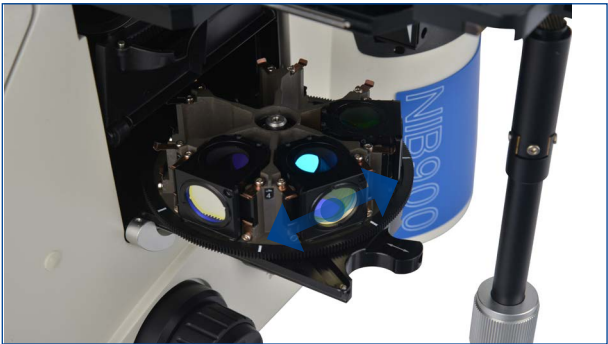
### Motorized universal condenser

The conversion of electric condenser module can be carried out.



### Motorized DIC sextuple nosepiece

It can realize the arbitrary conversion of six objective lenses.



### Motorized filter cube turret

It can realize the random conversion of 6-hole fluorescent module.



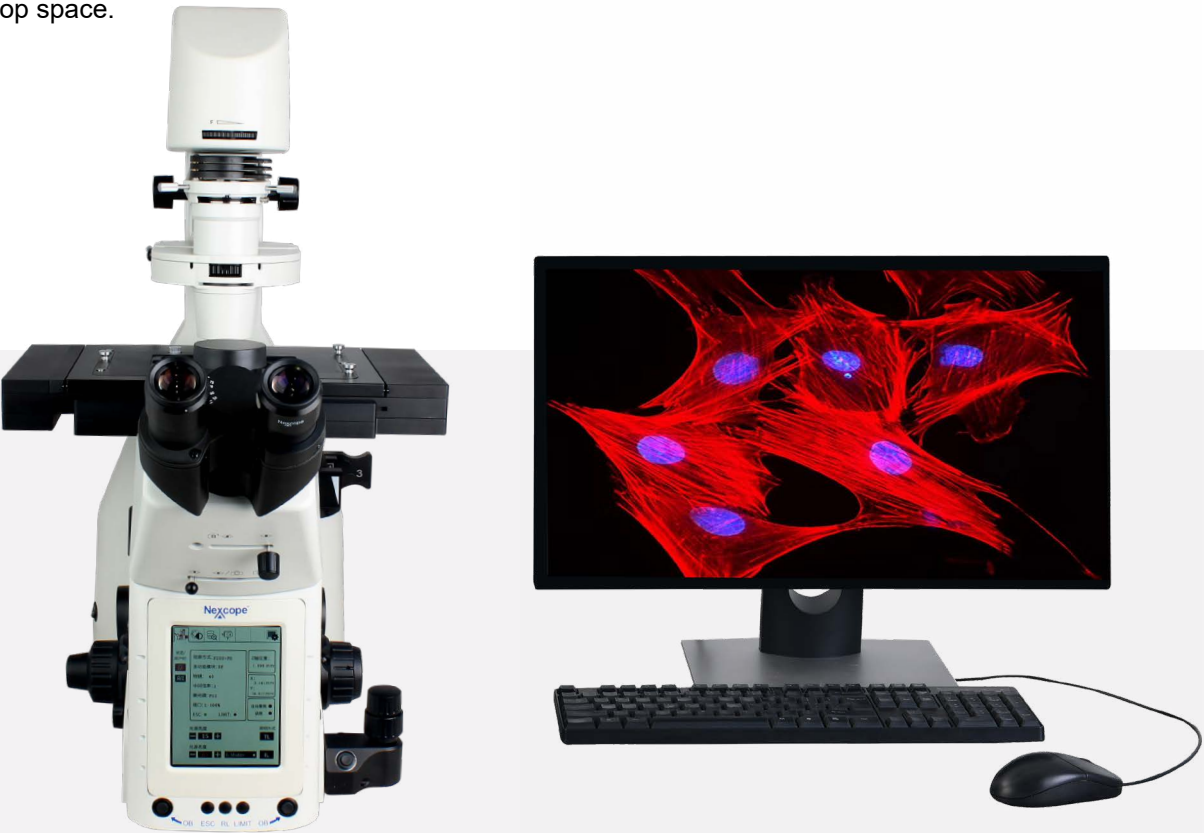
### Joystick module

Flexible positioning of the electric stage is carried out.

# NIB960

## Front Microscope Operation Screen To Realize Full Electric Control.

NIB960 adds a microscope operation screen at the front of the microscope, which can realize almost all microscope operations, including electric focusing, stage movement, objective lens selection, condenser module conversion, intermediate magnification conversion, side port output selection, aperture stop adjustment, multi-function turntable conversion and other functions, and integrates the operation handle on the right side of the fuselage, greatly reducing the desktop space.



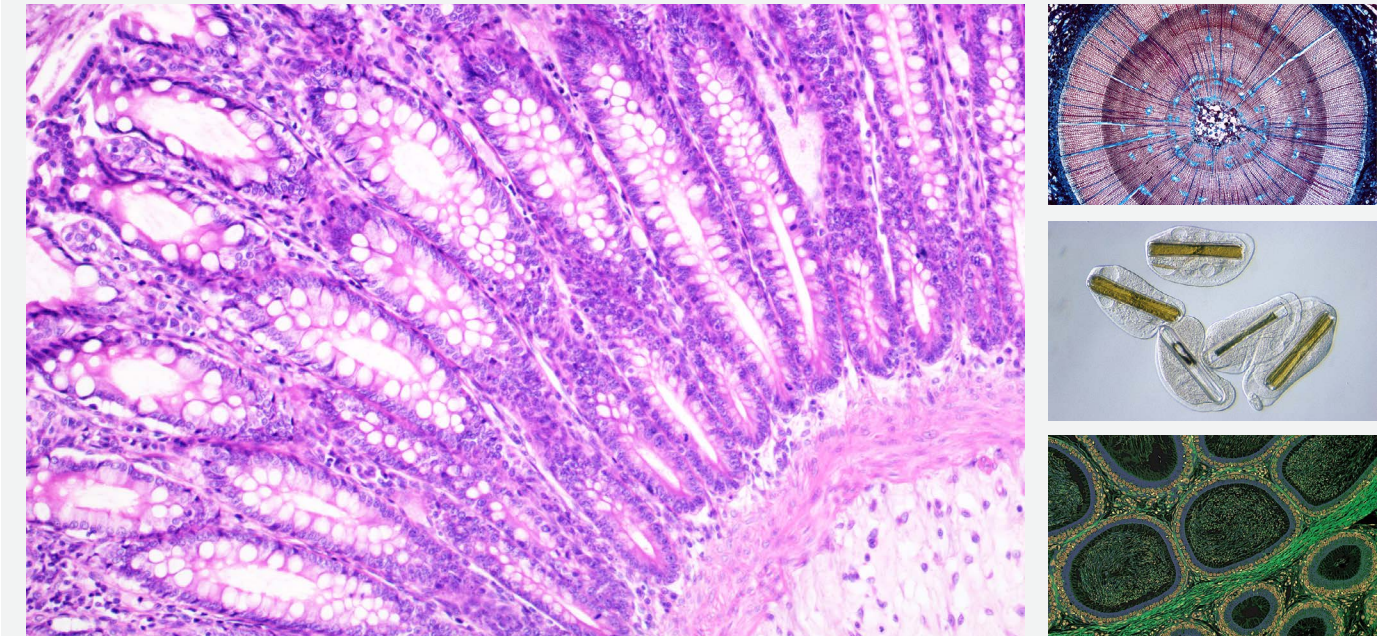
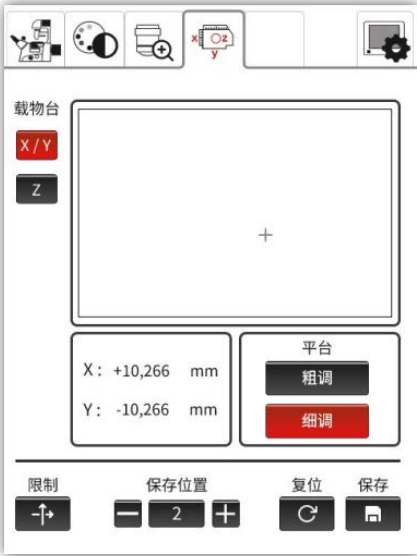
### Microscope status display



### Selection of observation mode



### Stage control

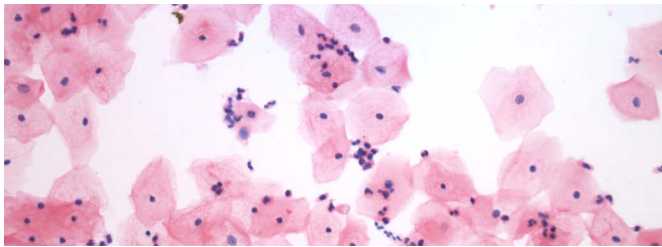


## Brightfield

Modular design provides a variety of flexible imaging methods.

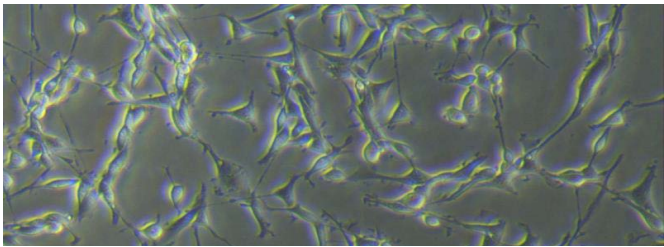
### Brightfield observation

Unique NIS infinite optical system, combined with semi-apochromatic fluorescent objective lens, can effectively eliminate the imaging problems such as field curvature, chromatic aberration, spherical aberration and coma, and the image is brighter, and higher resolution and flatness can be obtained at all magnifications.



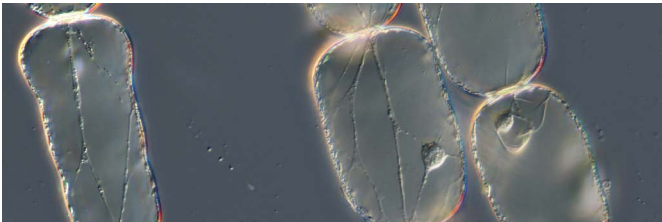
### Phase difference observation

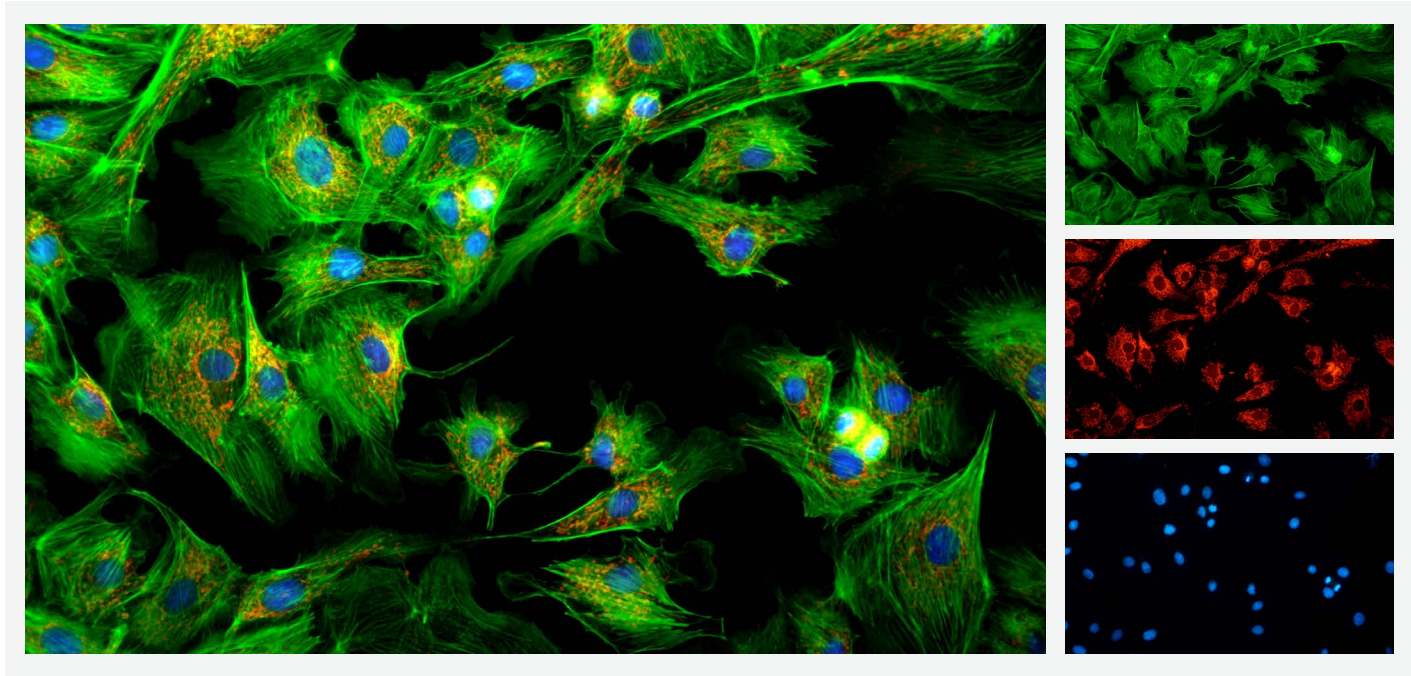
Phase contrast is an optical contrast technology, which uses a phase contrast objective and a condenser ring. High-efficiency halogen lamp can provide bright light source for the system, and can obtain clear images even at high magnification.



### Differential interference contrast (DIC)

Differential interference is a very cost-effective optical technology, which does not need expensive optical devices. Relief contrast only uses brightfield objective lens and two phase contrast adjustment sliders; For thick samples, such as induced pluripotent stem cells, differential interference can provide pseudo-three-dimensional glare-free images, while halo usually appears when using traditional phase contrast observation methods.





# Fluorescence

To provide you with reliable, clear and high-resolution fluorescent images.

## Adopt the latest coating technology.

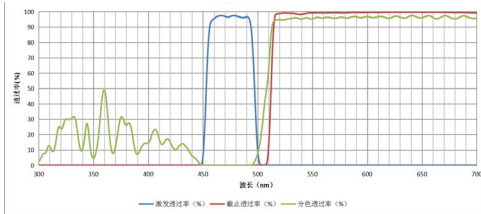
Adopting the latest advanced secondary ripple elimination coating technology, the fluorescence has higher transmittance, sharper cut-off and higher detection efficiency.

## Fluorescence observation is more comfortable.

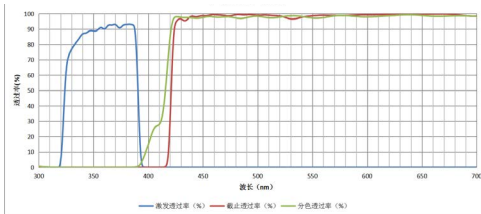
All fluorescent color filter components adopt ultra-high performance color filters. The fluorescent lighting pillar can be equipped with six color filter groups, which can simultaneously image a variety of dyed specimens. High-sensitivity fluorescence can obtain bright imaging effect. The leading coating technology also reduces scattered light and spontaneous fluorescence, ensuring a higher sex-to-noise ratio.



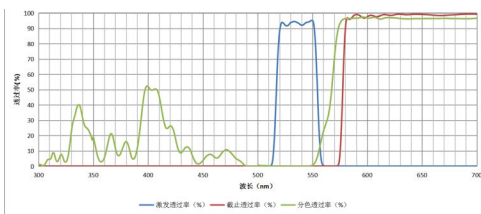
■ FIT Epi-fluorescence filter cube



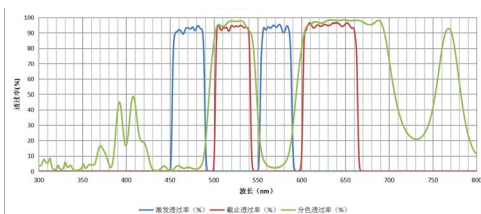
■ DAPI Epi-fluorescence filter cube



■ TRITC Epi-fluorescence filter cube



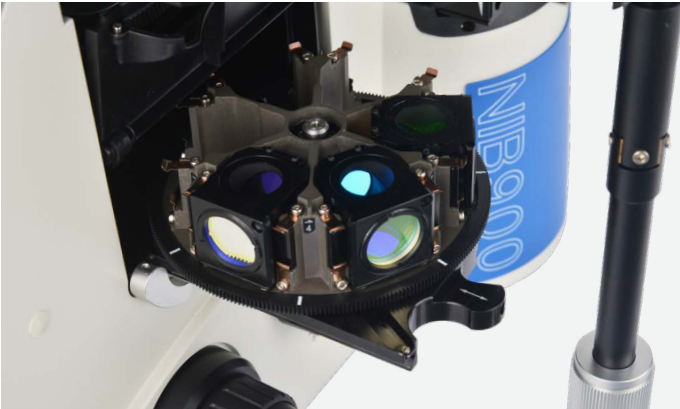
■ B/G Epi-fluorescence filter cube



# Clear Observation Can Be Obtained By Using Various Fluorescent Dyes.

## Fluorescent excitation module turntable: easier and more flexible

Adopt multifunctional six-station turntable structure, which can be easily taken out from the main machine and convenient to replace various fluorescent excitation modules.



## Simple and fast operation, NIB900 diaphragm slider

Reflective field diaphragm, aperture diaphragm and filter insert plate, and three different types of diaphragm sliders show the versatility of NIB900 in the study of living cells. When the aperture stop and the fluorescent filter board are used together, the optimal fluorescence intensity can be adjusted according to the selected fluorescent module and objective lens.



# Fluorescent power supply

## Mercury source

Osram 100W HBO ultra-high pressure spherical mercury lamp is standard, with large fluorescence brightness and uniform field of view.

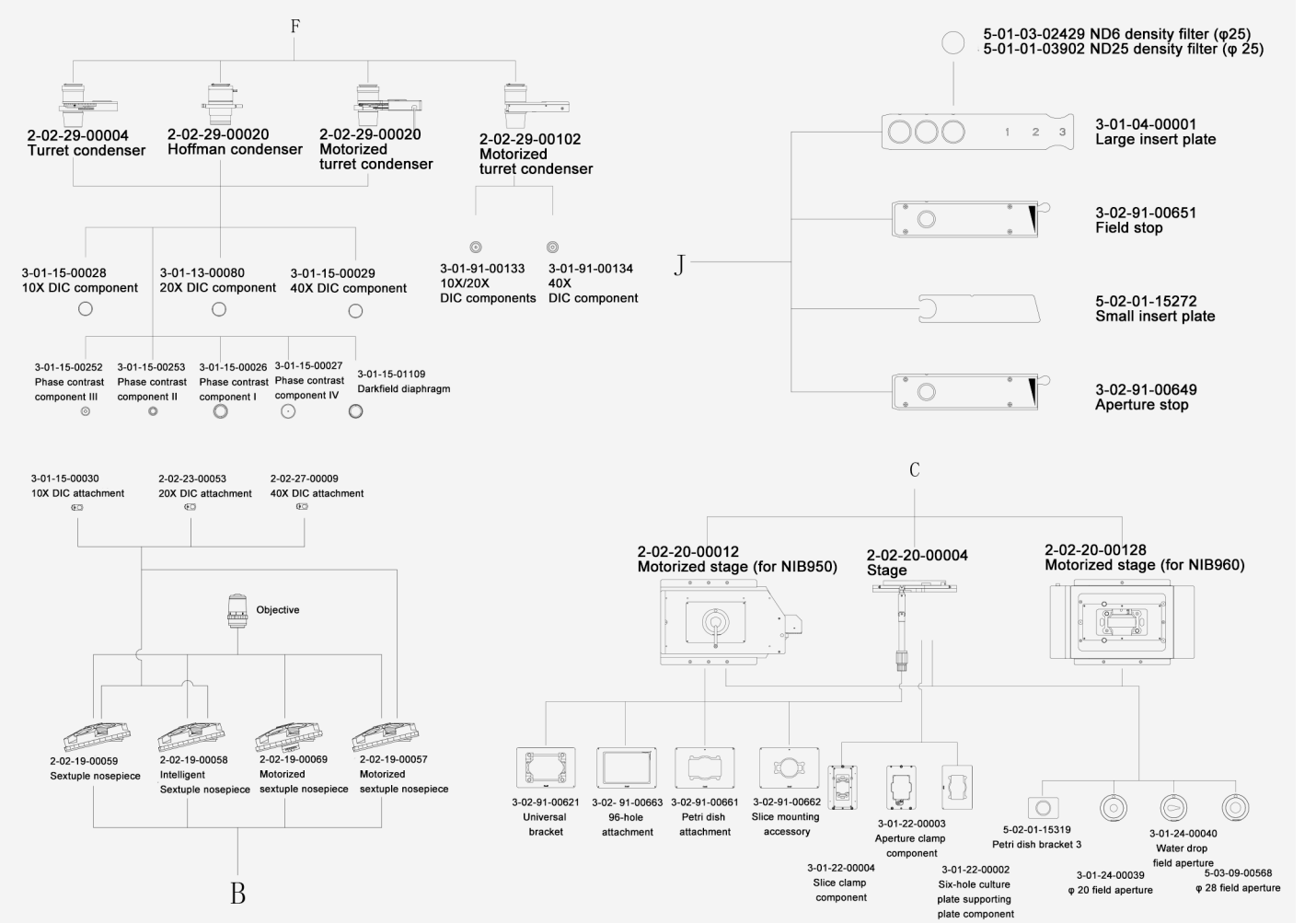
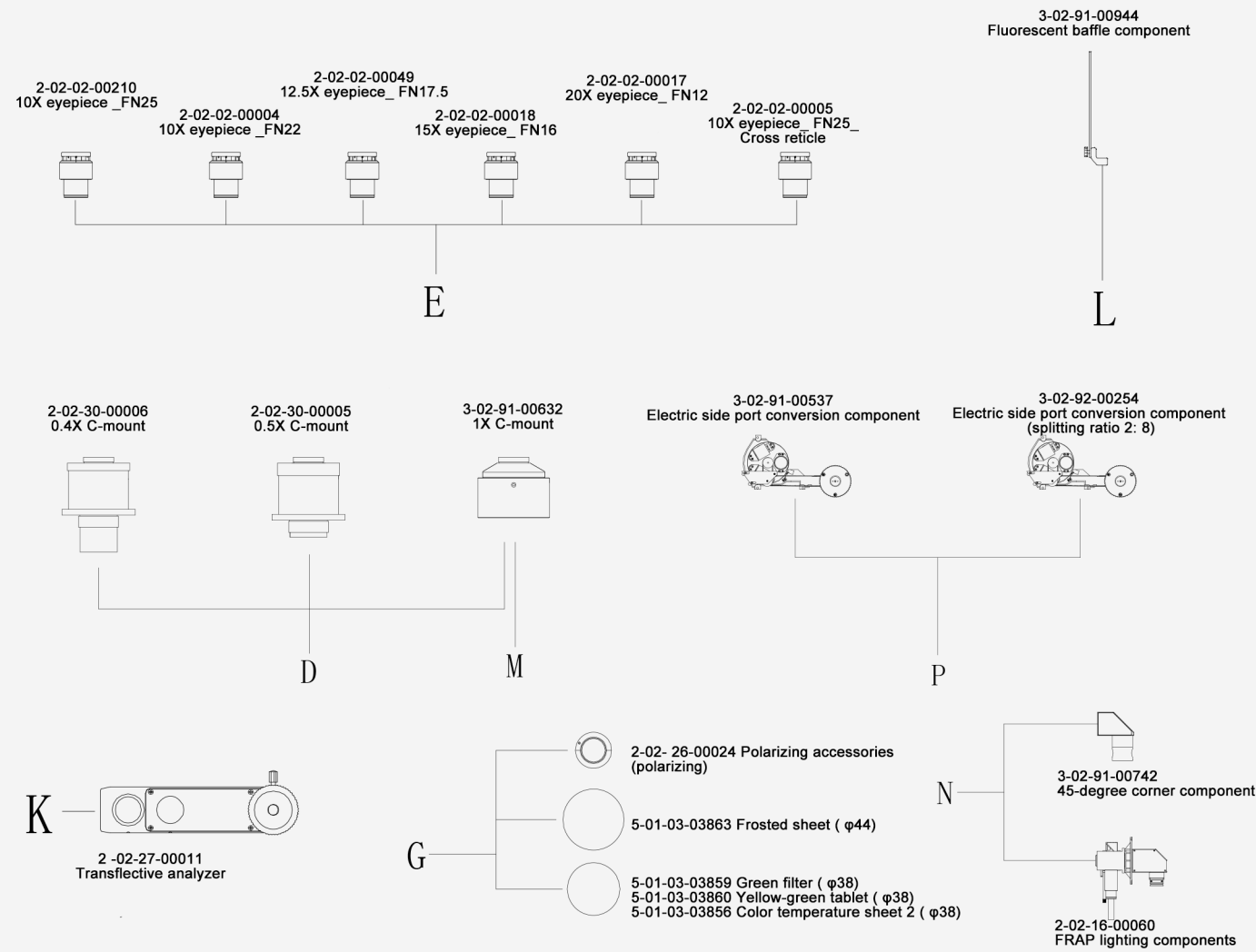


## LED light source

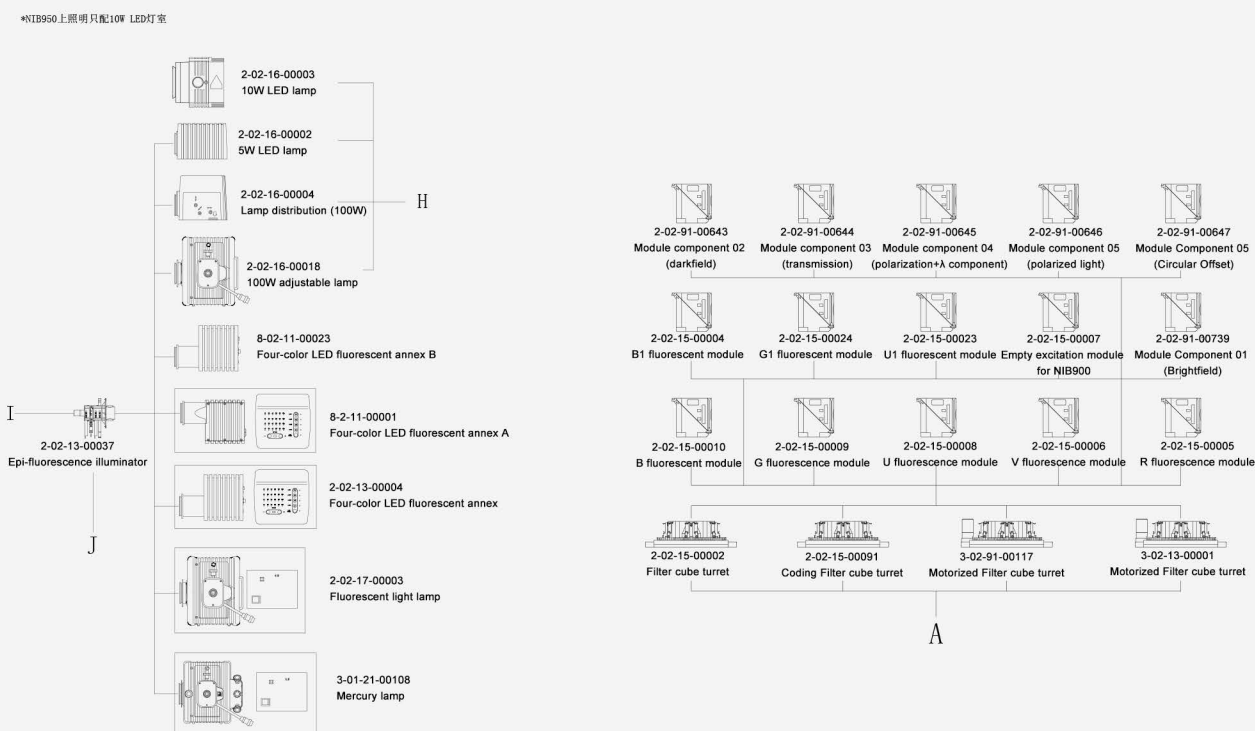
4-color LED light source, adjustable brightness, and the life of the bulb is up to tens of thousands of hours. Low phototoxicity and high friendliness to fine samples such as cells, which solves the problems of preheating, cooling and excessive temperature in use of traditional mercury lamps.



# SYSTEM LAYOUT

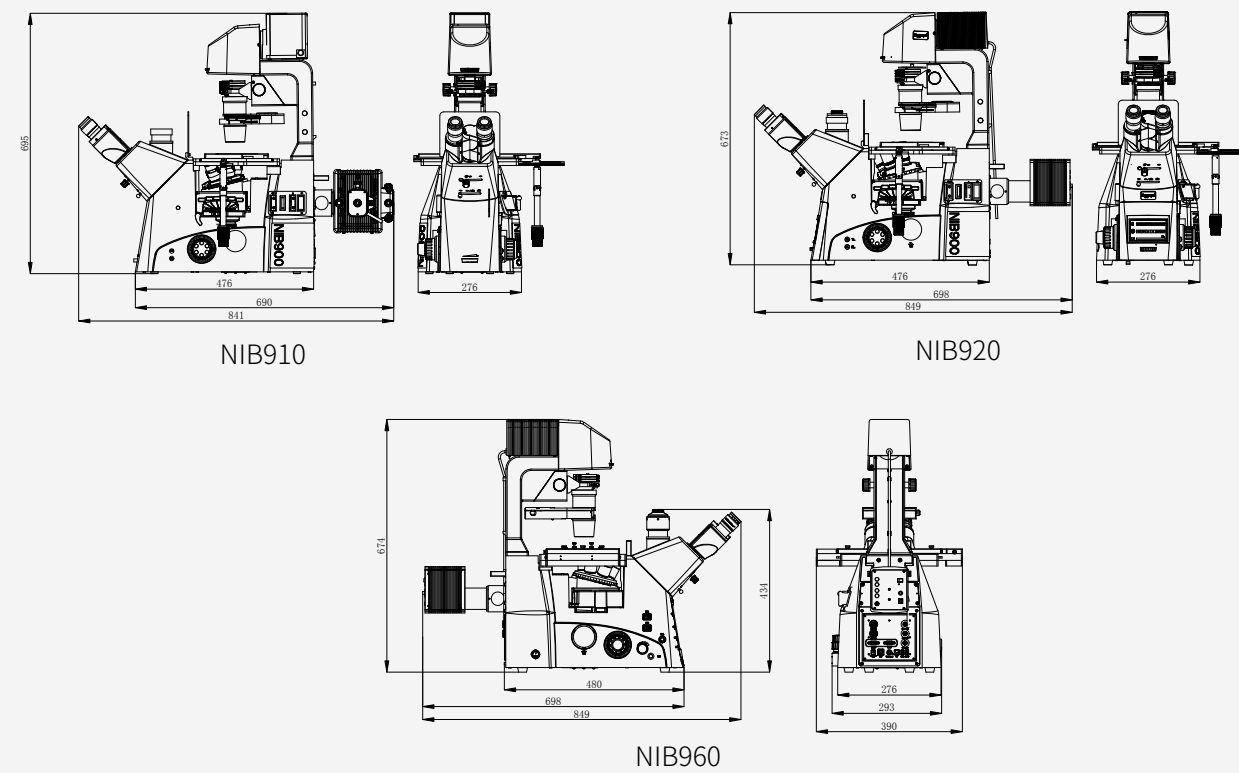


## SYSTEM LAYOUT



## DIMENSION FIGURE

Unit: mm



## NIB900 Series Inverted Microscope Specifications

|                            | NIB910                                                                                                                                                                                                            | NIB920                                         | NIB960                                                                                                                                                                       |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Optical System             | NIS Infinite Optical System                                                                                                                                                                                       |                                                |                                                                                                                                                                              |
| Eyepiece                   | ·SW10X/22 ·SW10X/25 ·EW12.5X/17.5 ·WF15X/16 ·WF20X/12                                                                                                                                                             |                                                |                                                                                                                                                                              |
| Viewing Head               | Seidentopf Trinocular Head(build-in bertrand lens),inclined at 45°, Interpupillary Distance 47-78mm                                                                                                               |                                                |                                                                                                                                                                              |
| Objective                  | ·N-iPLFN PH Plan S-APO Phase Contrast Objective 4X、10X、20 X、40X、60X<br>·N-iPLFN Plan S-APO Objective 4X、10X、20 X、40X、60X<br>·N-PLAPO Plan APO Objective10X、20 X、40X、60X、100X                                      |                                                |                                                                                                                                                                              |
| Nosepiece                  | Sextuple Nosepiece with DIC Prism Slot                                                                                                                                                                            | Encoded Sextuple Nosepiece with DIC Prism Slot | Electric Sextuple Nosepiece with DIC Prism Slot                                                                                                                              |
| Condenser                  | Long Working Distance Turret Condenser,NA0.55, WD=26mm, with 6 Modules for Phase Contrast, DIC and Brightfield                                                                                                    |                                                | Long work distance electric Turret condenser,NA 0.55, WD=26mm,with 7 Modules for Phase Contrast, DIC and Brightfield                                                         |
| Transmission lighting      | Kohler illumination<br>12V100W halogen lamp                                                                                                                                                                       | ·Kohler illumination<br>5W LED                 | Kohler illumination<br>5W LED                                                                                                                                                |
| Epi-illumination           | ·100W mercury lamp · LED fluorescent lighting                                                                                                                                                                     |                                                | LED fluorescent lighting                                                                                                                                                     |
| Focusing System            | Coaxial Coarse and Fine Adjustment                                                                                                                                                                                |                                                | Electric coaxial coarse inching lifting mechanism                                                                                                                            |
| Stage                      | 3 Layers Mechanical Stage, Moving Range 130x85mm, Flexible Knob, available for Different Size Small Stage.                                                                                                        |                                                | The moving range is 115×75mm, the maximum speed is 71mm/s, and the resolution is 0.1um. Small worktables with different sizes can be installed on the top stage as required. |
| Auxillary Stage            | Terasaki plate, φ38mm,φ54mm plate, General support plate, 96-hole plate tray                                                                                                                                      |                                                |                                                                                                                                                                              |
| Intermediate magnification | Multiplier 1X, 1.5x                                                                                                                                                                                               |                                                | Multiplier 1X, 1.5x                                                                                                                                                          |
| Display                    | -                                                                                                                                                                                                                 | Microscope use status display screen           | Touch screen, touch and display microscope status                                                                                                                            |
| Observation Method         | Bright field, Phase contrast, DIC, Fluorescence, Hoffman phase contrast                                                                                                                                           |                                                |                                                                                                                                                                              |
| Filter Turntable           | Epi-fluorescent filter turntable                                                                                                                                                                                  | Encoded Epifluorescent turntable               | Electric Epi-fluorescent filter turntable                                                                                                                                    |
| Fluorescent Illuminator    | With high-performance filter<br>Can be equipped with up to six Epifluorescent filters,<br>Use one position during bright field observation<br>center align reflected light field of view<br>stop of aperture stop |                                                |                                                                                                                                                                              |